

What is claimed is:

1           1.     A method of determining communications channel performance,  
2 comprising:  
3                 calculating a data communications speed of the communications channel  
4 based on records used for high-speed access qualification;  
5                 determining an actual data communications speed of the communications  
6 channel; and  
7                 comparing the calculated data communications speed and the actual data  
8 communications speed to determine if the records are accurate.

1           2.     The method of claim 1, further comprising generating a value for updating  
2 the records in response to a difference between the calculated data communications speed  
3 and actual data communications speed.

1           3.     The method of claim 2, further comprising providing a user interface to  
2 display content of the records stored in the database.

1           4.     The method of claim 3, wherein generating the value comprises receiving  
2 user modification of the content of the records displayed in the user interface.

1           5.     The method of claim 1, wherein calculating the data communications  
2 speed of the communications channel comprises calculating the data communications  
3 speed of a Digital Subscriber Line subscriber loop.

1           6.     The method of claim 5, wherein determining the actual data  
2 communications speed comprises accessing a value in a Digital Subscriber Line access  
3 module.

1           7.     The method of claim 1, further comprising accessing the records in a  
2 database system, the records containing at least one of the following information:  
3 insulation type of a cable included in the communications channel; a percentage of a  
4 large gauge section of the cable; a percentage of a small gauge section of the cable; a  
5 gauge size of the large gauge section; a gauge size of the small gauge section of the  
6 cable; an installation technique of the large gauge section; and an installation technique  
7 of the small gauge section.

1           8.     The method of claim 1, further comprising accessing the records in a  
2 database system, the records containing at least one of the following information:  
3 insulation type of a cable included in the communications channel; a percentage of a  
4 large gauge section of the cable; a percentage of a small gauge section of the cable; a  
5 gauge size of the large gauge section; a gauge size of the small gauge section of the  
6 cable; an installation technique of the large gauge section; an installation technique of the  
7 small gauge section; a filling type for the large gauge section; a filling type for the small  
8 gauge section; an indication of a region at which the cable is located; an indication of a  
9 distance of a communications channel segment between a Digital Subscriber Line access  
10 module and a wire distribution frame; and an indication of a gauge of a cable in the  
11 communications channel segment between the Digital Subscriber Line access module and  
12 wire distribution frame.

1           9.     The method of claim 1, wherein calculating the data communications  
2 speed of the communications channel based on the records comprises calculating the data  
3 communications speed of the communications channel based on the records indicating  
4 physical characteristics of the communications channel.

1           10.    The method of claim 9, wherein calculating the data communications  
2 speed further comprises determining electrical characteristics based on the records  
3 indicating physical characteristics of the communications channel.

1           11.     The method of claim 10, wherein calculating the data communications  
2 speed comprises causing test equipment to probe the communications channel to  
3 determine a length of the communications channel.

1           12.     The method of claim 10, wherein calculating the data communications  
2 speed of the communications channel comprises calculating the data communications  
3 speed of a Digital Subscriber Line subscribe loop.

1           13.     The method of claim 1, further comprising:  
2                 calculating an updated data communications speed of the communications  
3 channel based on the updated records; and  
4                 comparing the updated data communications speed with the actual data  
5 communications speed to determine if a difference exists between the updated data  
6 communications speed and the actual data communications speed.

1           14.     The method of claim 13, further comprising generating another value to  
2 update the records in response to the difference between the updated data  
3 communications speed and the actual data communications speed.

1           15.     The method of claim 1, wherein calculating the data communications  
2 speed of the communications channel comprises calculating the data communications  
3 speed of a communications channel between customer premise equipment and an access  
4 module.

1           16.     The method of claim 1, wherein calculating the data communications  
2 speed of the communications channel comprises calculating the data communications  
3 speed of a group of plural subscriber loops coupled to respective plural customer premise  
4 equipment.

1           17.    An article comprising at least one storage medium containing instructions  
2   that when executed cause one or more systems to:  
3                access records pertaining to characteristics of a communications channel;  
4                determine variance between a predicted data communications speed of the  
5   communications channel based on the records and an actual data communications speed  
6   of the communications channel; and  
7                update the records based on the determined variance.

1           18.    The article of claim 17, wherein the instructions when executed cause the  
2   one or more systems to access the records pertaining to the characteristics of a Digital  
3   Subscriber Line subscriber loop.

1           19.    The article of claim 18, wherein the instructions when executed cause the  
2   one or more systems to access records pertaining to the physical characteristics of Digital  
3   Subscriber Line subscriber loop.

1           20.    The article of claim 17, wherein the instructions when executed cause the  
2   one or more systems to access records pertaining to the characteristics of a group of  
3   Digital Subscriber Line subscriber loops, the communications channel comprising the  
4   group of Digital Subscriber Line subscriber loops.

1           21.    The article of claim 17, wherein the instructions when executed cause the  
2   one or more systems to further calculate the predicted data communications speed based  
3   on the records.

1           22.    The article of claim 17, wherein the instructions when executed cause the  
2   one or more systems to further provide a graphical user interface to display the records.

1           23.    The article of claim 22, wherein the instructions when executed cause the  
2 one or more systems to update the records in response to user input of one or more  
3 updated values.

1           24.    The article of claim 17, wherein the instructions when executed cause the  
2 one or more systems to further determine the actual data communications speed by  
3 accessing a value in a Digital Subscribe Line access module.

1           25.    The article of claim 17, wherein the instructions when executed cause the  
2 one or more systems to further perform a loop qualification process of the  
3 communications channel using the updated records to qualify the communications  
4 channel for Digital Subscribe Line data access.

1           26.    A system comprising:  
2                   an interface adapted to access records pertaining to characteristics of a  
3 communications channel; and  
4                   a controller adapted to receive an estimated bandwidth of the  
5 communications channel that is calculated based on the records;  
6                   the controller adapted to receive an indication of an actual bandwidth of  
7 the communications channel;  
8                   the controller adapted to update the records to reduce a variance between  
9 the calculated bandwidth and the estimated bandwidth.

1           27.    The system of claim 26, wherein the communications channel comprises a  
2 Digital Subscriber Line subscriber loop.